

B2 IL-6 antagonists of the invention which are derived from the IL-6 receptor molecule are as follows:

Trp-Arg-Lys- (D)Arg-Phe-AlaC3-Leu-Arg- (D)Tyr-AlaN3-NH₂

designated herein as PTR-5045 (SEQ ID NO:25);

(D)Lys-Arg- (D)Leu- (D)Arg- (D)Phe-AlaC3- (D)Leu-Arg- (D)Tyr-AlaN3-NH₂ designated herein as PTR-5041 (SEQ ID NO:18);

(D)Phe-Arg- (D)Leu- (D)Arg- (D)Phe-AlaC3-Leu- (D)Tyr-AlaN3-NH₂ designated herein as PTR-5043 (SEQ ID NO:4)."

B3 Please replace the title on page 37, line 33, starting with "Example 1. Detailed synthesis of PTR 5045 (SEQ ID NO:25)".

B4 Please replace the paragraph on page 39, line 7, starting with "Peptides were added to B16.F10.9 melanoma cells in the presence of 200 ng/ml IL-6 and 125 ng/ml sIL-6R. Incubation for three days. (Peptide concentration was calculated for average molecular weight of 1500 Da. Sequence of control peptides: PTR 5049 (L Form of SEQ ID NO:25): Trp-Arg-Lys- (D)Arg-Phe-AlaC3-Leu-Arg-Tyr-AlaN3-NH₂. The results described in figure 2 show that PTR 5045 (SEQ ID NO:25) and PRT 5041 (SEQ ID NO:18) fully block IL-6 activity at concentration of about 250 nM while PTR 5049 (L Form of SEQ ID NO:25) and PTR 4041 (SEQ ID NO:33) are not active."

B5 Please replace the paragraph on page 40, line 31, starting with "PTR 5045 (SEQ ID NO:75) was tested in this model in compare to the non-relevant control peptide PTR 4041 (SEQ ID NO:33) (Lys-GlyC2-Leu-Ile-Gln-Leu-Phe-GlyN3-Lys-Lys-NH₂). The results are summarized in the following table 3:"

B6 Please replace the title on page 45, line 1, starting with "Table 4: Summary of synthesis and bioactivity of certain preferred PTRs. (SEQ IDs NO:34 to NO:45)."

B7 Please replace the title on page 46, line 1, starting with "Table 5: Certain preferred backbone cyclic peptide analogs capable of inhibiting IL-6 derived from either IL-6, IL-6R (SEQ IDs NO:46 to NO:76) or gp130."